

RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT  
U.S. APPLICATION NO. 10/522,594

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (original): A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element:  $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$  (1) (in said formula (1) above,  $0.15 \leq x \leq 0.24$ ).

2. (original): A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate, wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element; and

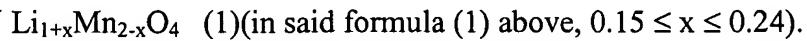
an Mn elution amount when immersing said particles in a mixture comprising an electrolyte salt and a carbonate solvent is 1000 ppm or less as determined by inductive coupling plasma emission analysis:  $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$  (1)(in said formula (1) above,  $0.15 \leq x \leq 0.24$ ).

3. (original): A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element; and

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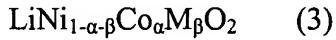
a specific surface area of said particles as determined by the BET method is  $0.3 \text{ m}^2/\text{g}$  to  $0.8 \text{ m}^2/\text{g}$  both inclusive:



4. (currently amended): The positive electrode active material for a secondary battery according to ~~any of Claims 1 to 3~~ claim 1, wherein said lithium nickelate is a compound represented by the following formula (2) or said compound in which some of Co or O sites are replaced with another element:



5. (original): The positive electrode active material for a secondary battery according to Claim 4, wherein said lithium nickelate is a compound represented by the following formula (3):



(in said formula (3) above, M comprises at least one of Al and Mn;  $0.1 \leq \alpha \leq 0.47$ ;  $0.03 \leq \beta \leq 0.4$ ; and  $0.13 \leq \alpha + \beta \leq 0.5$ ).

6. (currently amended): The positive electrode active material for a secondary battery according to ~~any of Claims 1 to 3~~ claim 1, wherein said lithium nickelate is a compound represented by the following formula (4): $\text{LiNi}_{1-p-q}\text{Co}_p\text{M}_q\text{O}_2$  (4)

(in said formula (4) above, M comprises at least one of Al and Mn;  $0.1 \leq p \leq 0.5$ ;  $0.03 \leq q \leq 0.5$ ; and  $0.13 \leq p + q < 1$ ).

7. (currently amended): The positive electrode active material for a secondary battery as claimed in ~~any of Claims 1 to 6~~ claim 1, wherein when a weight ratio of said lithium manganate to said lithium nickelate is  $a/(100-a)$ , "a" is in a range of  $20 \leq a \leq 80$ .

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8. (currently amended): A positive electrode for a secondary battery comprising said positive electrode active material for a secondary battery as claimed in ~~any of Claims 1 to 7~~ claim 1 which is bound via a binder.

9. (currently amended): A secondary battery comprising at least a positive electrode and a negative electrode, comprising said positive electrode active material for a secondary battery as claimed in ~~any of Claims 1 to 7~~ claim 1.

10. (original): The secondary battery as claimed in Claim 9, wherein said negative electrode comprises amorphous carbon as a negative electrode active material.

11. (currently amended): A process for manufacturing said positive electrode active material for a secondary battery as claimed in ~~any of Claims 1 to 7~~ claim 1, comprising the steps of: mixing an Mn source and an Li source to prepare a first mixture, which is then subjected to a first calcination at a temperature of no less than 800 °C; and

mixing a first-calcination product obtained by said first calcination with said Li source to prepare a second mixture with a higher rate of said Li source than said first mixture, and conducting a second calcination of said second mixture at a temperature of no less than 450 °C and lower than said first calcination to obtain said lithium manganate,

wherein a D<sub>50</sub> particle size of said Li source is 2 µm or less.